

## OBJECT LENS FOR OPTICAL HEAD

**Patent number:** JP2000081566  
**Publication date:** 2000-03-21  
**Inventor:** MARUYAMA KOICHI  
**Applicant:** ASAHI OPTICAL CO LTD  
**Classification:**  
- **international:** G02B13/00; G02B5/18; G02B13/18; G11B7/135  
- **european:**  
**Application number:** JP19990177546 19990623  
**Priority number(s):**

### Abstract of JP2000081566

**PROBLEM TO BE SOLVED:** To provide an object lens having a high utilization efficiency of light, permitting to record and reproduce a plurality of optical information recording media which is different in protective layer thickness such as DVD and CDR by a single object lens.

**SOLUTION:** The object lens 10 a single lens made of resin with aspheric surfaces on both sides, and a diffraction lens structure of a concentric ring belt pattern is formed centering the optical axis on one lens surface 11. The diffraction lens has wavelength dependency so that diffracted light of the same order number of at least two different wavelength light fluxes forms good wavefronts respectively to at least two kinds of optical disks which is different in the thickness of the protective layer.

---

Data supplied from the **esp@cenet** database - Patent Abstracts of Japan